

## ***ADEQ Water Quality Division SFY13 EOY Assessment***

The following summary reviews ADEQ's WQD SFY13 implementation of Clean Water Act and Safe Drinking Water Act programs as described in the Integrated workplan. The evaluation is based on commitments in the workplan, reports/submittals and information gathered during ongoing program conference calls. Overall, performance continues to be effective and reflect the dynamic nature of our work.

### **Administration**

ADEQ Water Quality Division (WQD), hereafter "ADEQ" receives approximately \$4.8M annually through several EPA grants to implement water programs, excluding the State Revolving Funds.

WIFA is a separate state agency charged with implementing the Clean Water and Drinking Water State Revolving Funds. ADEQ uses Drinking Water State Revolving Fund (DWSRF) setasides for program implementation (\$4.6M).

The bulk of federal funding is awarded annually through a Performance Partnership Grant (PPG) which combines CWA 106, PWSS and NPS funds. ADEQ also receives a separate monitoring grant and NPS projects grant. ADEQ develops an annual integrated workplan covering all activities and commitments for federally and non-federally funded tasks, and is based on a SFY (July 1- June 30).

All agencies in Arizona have been bound by a legislative rules moratorium since 2009. The Governor may grant an exception if the regulatory change lessens or eases a regulatory burden. ADEQ is thus unable to update any CWA or SDWA regulations. The WQD maintains a list of regulatory changes needed and may seek approval of minor water quality standard changes in SFY14.

### **Clean Water Act**

#### **Regional Water Quality Management Planning**

Water quality management planning for wastewater facilities continues through the CWA Section 208 process. ADEQ provided CWA 604(b) grant funds to the planning agencies, often Council of Governments (COGs). ADEQ provided technical assistance during the approval process for one 208 amendment and for thirty-three 208 Consistency Reviews. One water quality management planning agency completed their draft 208 regional plan update. Growth is still slow, and subsequently fewer 208 reviews were submitted. However, permit applications continue to be submitted for expanding facilities, renewals, and new facilities.

#### **Ambient Monitoring**

In SFY 2013 probabilistic monitoring was in the Warm Region. ADEQ supplements their statewide probabilistic monitoring with targeted monitoring: to address data gaps identified by the 305(b) planning list; to support WQS and TMDL development; to monitor Arizona's

Outstanding waters and investigate complaints. In SFY13 ADEQ collected a total of 186 surface water samples and 73 ground water samples.

ADEQ is currently involved in several projects that support development of WQS. In SFY13 ADEQ continued monitoring three effluent dependent waters, to evaluate their impact on wadeable perennial streams. As part of a four year sampling plan, ADEQ continued to collect nutrient data to support development of nutrient standards for rivers and streams. ADEQ also collected data as part of the two year rivers and streams NARS. Contract work was completed for physical integrity to assess relative bed stability as a new standard. Contracts were also used to complete intermittent stream sampling to evaluate the development of intermittent stream biocriteria water quality standards.

In SFY14 EPA looks forward to continued progress in the following areas:

- Entering all surface water quality data in STORET on a quarterly basis
- Refinement of nutrient criteria for lakes and development of nutrient criteria for rivers
- Monitoring in the cold region (>5000 feet) and statewide
- Coordinating with other ADEQ programs on monitoring in priority watersheds

### **Concern**

EPA's monitoring grant requires all state-generated water quality data be entered into a publicly available database, STORET. ADEQ has significant gaps in data entry (since 2005) and has struggled with data transfer from the state system to the federal system due to staff IT shortages.

### **Water Quality Standards**

In SFY13 ADEQ committed to completing work on: developing implementation procedures for antidegradation, biocriteria, bottom deposits and fish consumption standards; to initiate a WQS triennial review; and to continue work on the lakes narrative nutrient standards.

The biocriteria and bottom deposits implementation procedures were public noticed in September 2012. ADEQ met with commenters on several occasions, made revisions and prepared a response to comments. The documents are in final review. The fish consumption and antidegradation procedures await formal public review.

ADEQ submitted a request for rule making exception for SFY13, but did not receive a response from the governor in time to complete the triennial review as planned. In support of the triennial review, ADEQ held regular meetings throughout the fall of 2012 to update the status of projects and to discuss appropriate revisions and draft language; conducted research to support new or revised standards on boron, *E. Coli*, and nutrients; and identified latitude and longitude errors for surface waters in Appendix B of the Arizona WQS.

EPA supports ADEQ's efforts to develop nutrient criteria which began with lakes. ADEQ provided data and other support to the contractor re-evaluating the lakes narrative nutrient standards; collected additional data under the Nutrient Monitoring Strategy; reviewed EPA's 2013 criteria document for ammonia; and conducted a literature search on the occurrence of

freshwater mussels in Arizona. The presence of mussels would lower the applicable numeric ammonia criteria.

In SFY14 EPA looks forward to continued progress on:

- Arizona's 2014 WQS Triennial Review including some revisions accepted by the governor;
- Working with ADEQ on revisions to their Lakes Narrative Nutrient Standards and continuing work on Rivers and Streams nutrient standards development; and
- Finalizing antidegradation implementation procedures.

### **Water Quality Assessment and Total Maximum Daily Load (TMDL) Development**

ADEQ responded to comments and revised the 2010 IR which was approved by EPA in June 2013. Simultaneously, ADEQ drafted the 2012/2014 IR. As part of the 2012/2014 IR ADEQ developed an organochlorine pesticide delist report for several reaches of the Gila River. In the SFY13 workplan, ADEQ added a new deliverable and developed water quality improvement success stories for Alum Gulch, Pinto Creek and Turkey Creek.

ADEQ met its target to finalize four TMDLs, and complete the initial public notice for three TMDLs. The Gila River suspended sediment concentration TMDLs (2) were submitted to EPA and approved in April 2013. The Little Colorado River *E.coli* TMDLs (2) were submitted for approval in June, 2013. The Alamo Lake Mercury TMDL (1) and San Pedro River *E.coli* TMDLs (3) completed a first round of public notice. ADEQ also continued to collect and analyze data for TMDLs and Implementation plans in several watersheds including Big Bug Creek, Mule Gulch, Queen Creek and Pinto Creek.

The TMDL Unit spent significant time working in EPA and ADEQ priority watersheds including the Santa Cruz River, Granite Creek/Watson Lake and Boulder Creek. ADEQ modeled data, drafted TMDLs, shared data, participated in public meetings, workgroups, and stakeholder meetings. In addition, ADEQ is participating with Region 9 in an EPA HQ led effort to develop a revised ACS measure for TMDLs (SP10).

In SFY14, EPA looks forward to continued progress on:

- Submittal of the Watson Lake and Granite Creek Nutrient and *E.coli* TMDLs to EPA and for public notice;
- Public notice of the 2012-2014 Integrated report; and
- Increasing coordination with other ADEQ and EPA programs to identify and complete TMDLs and assessments in priority watershed areas.

### **NPDES Permitting**

ADEQ nearly met its commitment to maintain 90% of permits current (as defined by EPA). At the time of the SFY13 review, ADEQ was 89% current with 11 permits for majors, 14 permits for minors and 2 general permits expired greater than 180 days. ADEQ's permitting process was revised in 2011 to establish fee-based NPDES permits which may, in a few instances, delay permit issuance while awaiting receipt of permittee's payment.

ADEQ re-issued the Construction General Permit in SFY13. The ADOT stormwater permit renewal has been delayed although ADEQ projects its completion in SFY14. All seven municipal Phase I MS4 permits are current. The Phase II MS4 general permit currently provides coverage for 3 small cities; however based on 2010 census data, seven more communities are expected to enroll. In SFY13, ADEQ met with most of these communities to explain the Phase II program, requirements and expectations. ADEQ has developed a monitoring protocol document to help these communities implement their Phase II stormwater programs.

ADEQ, in partnership with City of Phoenix, has successfully enrolled many previous non-filers, to obtain coverage under the non-mining MSGP. This increase in future enrollees is expected to continue in SFY14.

ADEQ's CAFO permit expired in April 2009, and cannot be reissued until ADEQ's regulations can be revised to be consistent with EPA regulations. To resolve some problems associated with this expired permit, ADEQ issued an individual permit for one CAFO facility in SFY13.

In FY14, EPA looks forward to ADEQ's continued progress on permit renewals and efforts in the following specific areas:

- Quarterly updates on re-issuance of AZPDES permits from AZPDES unit to EPA's WTR-5 and WTR-5 for tracking status (while waiting for completion of software upgrades to connect the State's database and EPA's ICIS database)
- High profile permits, including Nogales IBWC, City of Sierra Vista, Asarco Mission.
- Variances from water quality standards have been requested by six AZPDES facilities
- MS4 Phase II permit development – 7 additional communities/clusters
- ADEQ's audit of 8 Ph II stormwater permits.
- Inclusion of EPA methods 245.7 or 1631 for detecting ultra low levels of mercury for assessment and compliance with effluent limitations
- Inter-office/agency program coordination on Watson Lake/Granite Creek TMDLs

### **Non Point Source (NPS) Program and Project (CWA 319) Management**

Program implementation is based on a State Management Plan (SMP) which establishes objectives and activities to accomplish the objectives. Accomplishments are detailed in an Annual Nonpoint Source Program Report. Project oversight includes the solicitation, award and oversight of projects to improve water quality. Projects can take up to 7 years to complete. The SFY13 workplan reflects the milestones and commitments of the SMP. Beginning in SFY09 and continuing through SFY13, the NPS Program has focused on funding and providing technical support to watersheds prioritized on their Targeted Watersheds list. The key criteria for Targeted Watersheds list are the presence of NPS related impairments, as well as, local stakeholder interest and ability to effectively address impairments.

SFY13 marked the beginning of funding projects identified by local groups in their Watershed Improvement Plans (WIPs). This is a shift from state wide implementation request for proposals to targeting impaired watersheds that have local support and focused planning. WIPs have been completed for the following watersheds: Granite Creek, Oak Creek, San Francisco/Blue Rivers, and the San Pedro River. At the end of SFY13, implementation projects were awarded for Granite Creek, Oak Creek, and San Francisco/Blue River (\$1.2 million). Multiple Requests for

Grant Assistance (RFGA) were made this year in response to reducing the unliquidated obligations.

ADEQ continued to work with Arizona Department of Emergency Management on mitigating run off from the catastrophic Wallow fire.

The EPA FFY12 load reduction deadline was met, with reductions of 2,991 lbs N, 1,468 lbs P, and 800 tons of sediment. Load reductions are calculated by the University of Arizona, who developed a load reduction model specifically developed for the arid Southwest. U of A continues to provide support to DEQ on load reductions and DNA markers.

ADEQ provided technical support and conducted nonpoint source education and outreach efforts to watershed stakeholders. ADEQ provided outreach materials for youth education programs and participated in 4 watershed groups or other public meetings to discuss watershed issues on both statewide and local scales.

ADEQ also coordinated the National Water Quality Initiative, which took some time to re-convince the National Resources Conservation Service to switch their priority watershed to ones where projects funded by the Environmental Quality Incentives Program (EQIP) would have the greatest effect. The Unit also worked on multi-agency watersheds, Upper Santa Cruz River and Hillside Mine, which required cross agency coordination.

In addition to projects based on good plans in targeted watershed in the upcoming year, EPA looks forward to being involved in the revision of the NPS Strategic Management Plan.

ADEQ continues to manage, and reduce, NPS pollution adaptively in Arizona.

In FY14 project efforts will include  
Santa Cruz River

EPA and DEQ will continue to work together on developing an implementable plan for reducing pollutants in the SCR.

We will be meeting in the watershed to discuss reasonable outcomes and expectations with the local groups on January 22<sup>nd</sup>.

San Pedro River

The WIP is done and proposals will be submitted in the next RFGA round. It's expected that NRCS will work with its local lead on submitting projects.

Hillside

ADEQ will work with other State agencies on a completing project without EPA financial support.

The NPS grant that was earmarked for this project needs to be extended to 2016. EPA will extend the grant once we receive a written request from DEQ for a no-cost extension.

NPS Funds

Now that the Hillside project is in limbo, EPA is concerned that ADEQ NPS funds will be difficult to obligate (\$3.2 million). EPA understands its role in the funding situation and will do everything it can to help the State obligate NPS funds within the year the funds were awarded.

Are all the match possibilities exhausted? State agency FTE (DOA, SLD) can be a match for Hillside, RCD's, or the repayment pot of SRF funds.

#### 5-Year Plan Update

Draft timeline for finishing the SMP by June 2014 has been agreed to by Vollmer and Osterberg.

### **Wetlands and 404**

ADEQ was directed by the legislature to evaluate 404 program assumption. In SFY13, ADEQ held stakeholder meetings to gather input. Additional meetings are expected in SFY14.

In SFY13, EPA and ADEQ worked collaboratively on the proposed Rosemont Mine. ADEQ has reviewed and commented on the EIS, has reviewed and issued permits under APP, MSGP and air and will be conducting an antidegradation analysis for the project and CWA 401 assessment for the 404 permit. EPA anticipates the collaborative process will continue in SFY14 with ADEQ on the antidegradation analysis and 401. EPA will continue to work with USFS on the EIS and the ACOE on the 404 permit.

### **Border**

ADEQ operates and maintains an Office of Border Environmental Programs (OBEP) located in Tucson, AZ. They are responsible for border region and transboundary issues for all media activities along the US-Mexico Border Region. Specific to the Water Programs, OBEP's border engineer continued to provide high quality engineering reviews, project management and oversight, quality control and reporting in support of and in coordination with EPA's US-Mexico Border Program (PDAP and BEIF) projects. In SFY13, OBEP's border engineer stepped up to fill a void created when both EPA and the Border Environment Cooperation Commission (BECC) experienced staffing changes and performed project management tasks above and beyond his scope of work. The OBEP hydrologist has consistently provided exceptional technical support on water quality and storm water issues, oversight and reporting of spills from the International Outfall Interceptor (IOI) and outreach and training for utilities on both sides of the border. Additionally, the border hydrologist has worked tirelessly over the years to develop a sustainable industrial pretreatment program in Nogales, SN in an effort to mitigate the associated impacts to the Nogales International Wastewater Treatment plant and the Santa Cruz River. In SFY13 the pretreatment program achieved a level of functionality and an equilibrium unimaginable just a few years ago. OBEP has been invaluable in support of EPA water program efforts along the Border.

In SFY14, OBEP will continue its project management oversight of federally funded construction projects, provide technical support and assist with the oversight of the new pretreatment requirements in the AZPDES permit for Nogales. OBEP bi-weekly reports provide valuable information on efforts and activities along the Border,

## Enforcement and Compliance

**Inspections:** ADEQ set a target of inspecting 50% of the major AZPDES permitted facilities (35 of 71) and 20% of the minor facilities (18 of 89) in SFY13. EPA's Compliance Monitoring Strategy (CMS) requires the inspection of majors once every two years (50%) and all minors inspected once in a 5 year cycle (20%). ADEQ inspected 35 major facilities and 20 minor facilities, thus meeting and exceeding the goals of the CMS for major and minor facilities, respectively. Additionally, ADEQ and SROCU responded to 23 citizen complaints related to the Clean Water Act, resulting in 21 non-routine inspections. ADEQ intends to pursue an Alternative Compliance Monitoring Strategy in response to the Auditor General's Report and non-compliance by minors.

ADEQ exceeded its stormwater inspection targets of 60 industrial and 60 construction (40 Phase 1 and 20 Phase 2) inspections in SFY13 by conducting 89 industrial, 68 Phase 1, and 36 Phase 2 construction inspections. Although EPA's CMS sets goals of 10% of all industrial facilities and 5-10% CMS goals for construction facilities, EPA has agreed to lower commitments instead seeking an inspection strategy. The CMS goals for the stormwater programs also include audits of MS4s. ADEQ did not commit to any Phase I MS4 audits but accompanied EPA and its contractor on 1 Phase I MS4 audit during SFY13. ADEQ did meet its commitments of 2 Phase II MS4 audits but have committed to 8 Phase II MS4 audits in SFY14. Responsibility for MS4 audits moved from the Compliance Section to the Surface Water Section. Coordination on audits and other stormwater inspections will be needed.

AZ has 100 CAFOs statewide covered by AZ APP permits and 2 subject to AZPDES permit. ADEQ exceeded its SFY13 target of 4 CAFO inspections by conducting 9 CAFO inspections of its permitted and unpermitted facilities. ADEQ met its SFY13 inspection targets for the biosolids program (5 POTWs and 6 land application facilities) and exceeded its target of 26 annual report reviews submitted under the biosolids rule by conducting 31 reviews.

In SFY14, EPA looks forward to continued progress in developing stormwater field capacity as ADEQ and EPA have agreed that stormwater inspections and MS4 audits are an area for improvement. Resource limitations, technical capacity and number of inspectors will continue to be an issue in meeting stormwater inspection commitments. ADEQ will continue to accompany EPA during MS4 audits to further develop skills in MS4 inspections. With limited resources, strategically focusing inspections is critical to ADEQ's program success. ADEQ and EPA will continue to communicate regularly on stormwater implementation.

**Pretreatment Program:** During SFY13, Arizona met all of their pretreatment targets. Specifically, ADEQ met its inspection targets (3 compliance inspections and 1 POTW SIU-oversight only inspection), auditing targets (one pretreatment audit of an approved pretreatment program) and report review targets (16 annual /semi-annual reports).

Additionally, there is a specific PPG target for ADEQ to support pretreatment work in the Ambos Nogales border region, as industrial wastewater from Mexico has caused or contributed to NPDES permit violations at the Nogales International Wastewater Treatment Plant. During SFY13, ADEQ finalized this permit and included more enforceable pretreatment to help protect

the treatment plant and its receiving water, the Santa Cruz River, from industrial pollutant discharges.

In SFY14, ADEQ has committed to an increased field presence and support to the increased pretreatment requirements for the NPDES permit issued for Nogales. EPA looks forward to ADEQ's continued progress in developing a comprehensive pretreatment program.

**Data Management and Reporting:** ADEQ did not meet its commitment to enter discharge monitoring reports and state inspection and enforcement actions into EPA's ICIS-NPDES national database. Due to data programming issues, ADEQ stopped flowing NPDES data into ICIS as of mid-November 2012. In the interim, ADEQ continued to enter permit and monitoring information into its state databases.

Without NPDES data in ICIS, EPA's view of discharger compliance data and state activities is severely limited. In particular, EPA cannot generate the QNCR history of major facilities in Significant Non Compliance (SNC) and the Watchlist (major facilities in SNC for 2 consecutive quarters). As a stop-gap measure, ADEQ did generate a QNVR of majors from its Azurite database. However, without the ICIS QNCR, compiling a list of SNCs and the Watchlist would require significant resource-intensive manual efforts, which neither ADEQ nor EPA could provide. ADEQ did submit its quarterly compliance reviews and reports to EPA on time.

**Enforcement:** In SFY13, ADEQ issued 2 Consent Orders to the Cities of Buckeye and Flagstaff, tracked the progress of 5 Administrative Orders from previous years, issued 68 Notices of Opportunity to Correct (NOCs) and Notices of Violation (NOVs) and closed 55 NOCs and NOVs. In addition, Prescott Valley agreed to a \$657,000 settlement for various wastewater spills, including a discharge of 1.6 M gallons of wastewater into the Agua Fria River in January 2010. ADEQ continues to use informal enforcement tools and anticipates new processes established by the LEAN exercise will improve overall compliance efforts.

Major facilities are flagged as being in SNC if they have acute or chronic effluent limit violations that exceed EPA's criteria for magnitude and duration. Facilities may also be flagged as SNC for late submittal of discharge monitoring reports. Given ADEQ's data management issues discussed above, neither ADEQ nor EPA could generate a list of SNC violations during SFY13. Flagging SNC violations is an important tool for targeting enforcement to the highest priority violations. State enforcement response to SNC violations is a critical measure that EPA uses in our oversight of State NPDES enforcement programs

### **Concerns**

ADEQ's inability to flow data into ICIS from mid-November 2012 has compromised EPA's ability to monitor and evaluate ADEQ's Surface Water Compliance and Enforcement program as detailed in Task 1.4.3 introductory section, and deliverables (11)(a) and (12) of the integrated SFY13 Work Plan. The requirement for NPDES permit, compliance monitoring data and enforcement data entry is required as part of the program approval and described in the MOA. ADEQ has been aware of the need for updated data transfer protocols since 2009 and has been working on it since then. EPA HQs has provided contract help to ADEQ with expert technical assistance, which the IT Department has used in their efforts to program systems for flowing



NPDES data to EPA's ICIS database. Despite this assistance, project completion deadlines have continually slipped. The initial project completion date of June 30, 2013 is long past, with no anticipated actual completion by that date, despite being reportedly 95% complete since the week of August 9.

EPA has not been able to effectively oversee the SFY13 workplan progress, nor is it able to effectively oversee the current SFY14 workplan progress. Additionally in early FFY14, EPA will be conducting the AZ State Review Framework, an enforcement-led multi-media evaluation of compliance, using FFY13 data. Without the necessary data in ICIS, EPA will be unable to effectively conduct the review, which will result in a poor rating for ADEQ.

### **Safe Drinking Water Act**

**Public Water Supply Supervision:** See separate review.

#### **Source Water Protection**

The Drinking Water Monitoring and Protection Unit manages AZ's efforts to prevent contamination of ground and surface sources of drinking water. For SFY13 Arizona continued to successfully implement their source water protection priorities: (1) evaluate most-threatening contaminant risks to drinking water sources (2) conduct public outreach/education to promote source water protection; and (3) improve the original source water assessments. In the past year, the Drinking Water Monitoring and Protection Unit continued to work closely with ADEQ's Waste Division to review UST/LUST data to target sites that potentially threaten drinking water sources. For their education tasks, they focused on five schools that own/operate a public water system to complete source water protection plans. ADEQ also worked with several other schools to develop site assessments. For public outreach, ADEQ conducted ten workshops and outreach events to inspire source water protection at the local level. ADEQ helped the City of Holbrook develop a source water protection plan and the City of Wickenburg update their wellhead protection plan. To improve the original statewide assessment, ADEQ continued to update/evaluate well location data and the database of potential contaminating activities. They began querying databases to identify community water systems with a single source of drinking water; these are more vulnerable than systems with multiple sources.

Despite their robust program, ADEQ did not meet their SFY13 target of assisting three community water systems achieve minimized risk to public health by source water protection. ADEQ states, however, that the actual numbers achieved rely on the willingness and ability of public water systems to participate in the voluntary source water protection program. They have accordingly lowered their SFY14 target to one system, reflecting the obstacles to protection. ADEQ expects to continue to fully implement their protection efforts next year to meet and perhaps exceed the SFY14 target.

#### **Ground Water Program**

The Ground Water Section of ADEQ is responsible for implementation of the Aquifer Protection Permit (APP) Program. EPA's Ground Water Office (GWO) works with ADEQ's APP Program to share information for separate underground injection permitting programs that regulate injection activities in Arizona. EPA and ADEQ coordinate on injection activities requiring both a

federal UIC permit and a state APP which have groundwater related issues and concerns. The permitting application requirements and process of the UIC and APP programs are similar, but separately implemented by EPA and ADEQ, respectively. Sharing of information and regular updates allow us to work out any inconsistencies and coordinate, where appropriate.

ADEQ also shares information on their reviews of these recharge projects to ensure that the injection of treated wastewater meets our UIC requirements for Class V injection wells.

In SFY13, we worked with ADEQ on the Morton Salt facility and the proposed Florence Copper Production Test Facility (PTF). The proposed PTF is under consideration for a federal UIC permit and is a highly opposed project by the Town of Florence. Working with ADEQ has been very successful during this grant period and useful to help meet our goal to protect underground sources of drinking water (USDW) as defined under the Safe Drinking Water Act.

In addition to coordinating on permitting projects, ADEQ provides updates of its extensive drywell (Class V injection wells) database for EPA's national UIC database. Arizona regulations require that any person who owns an existing or proposed drywell in the State must register the drywell with ADEQ. EPA also requires owners/operators of injection wells which are authorized by rule (i.e., drywells or any other Class V injection well) to submit inventory information. The drywell update from ADEQ ensures that our UIC database is up-to-date for this type of well.

The key ongoing focus area in SFY14 for the Ground Water Program will be continued coordination between ADEQ and EPA on the proposed Florence Copper Project. ADEQ's APP permit for this site was issued, and is currently under state appeal. EPA is still evaluating the project for a Class III UIC permit. Florence Copper requires both permits to be in place in order to proceed with their copper mining Production Test Facility.